DRAFT

Chesapeake Bay TMDL - Stakeholder Advisory Committee

Onsite/Septic Workgroup
July 15, 2010, 1:00 p.m.
Department of Health, Madison Building

I. Overview and Expected Outcomes

The onsite/septic workgroup met on July 15 at the Virginia Department of Health in Richmond, Virginia. The meeting was the first of two workgroup sessions hosted by the Department of Environmental Quality (DEQ) and the Department of Conservation and Recreation (DCR). The purpose of the meeting was to share current and useful information about the Virginia Bay TMDL process. DEQ/DCR sought the workgroup's concerns and questions to determine what information they might need in the future. This input will be presented to the steering committee.

II. Review of EPA's July 1st Allocations by State and River Basin

A presentation given by DEQ explained the EPA's draft allocations for phosphorous (P) and nitrogen (N) for Virginia's 5 river basins: the Eastern Shore, James, Potomac, Rappahannock, and York.

Principal Issues and Commentary:

- There was concern about the EPA's watershed and water quality models and the draft allocations that are based on these models.
- DEQ explained that the EPA recognized the shortcomings to the model and are currently updating it. To address their concern that new allocations might be lower in the updated model, the EPA has established a Temporary Reserve. EPA expects the Watershed Implementation Plans (WIPs) developed by the states will identify the actions that are needed to meet the July 1st allocations along with the necessary program enhancements and funding. The WIPs are also supposed to identify further actions needed to meet the additional Temporary Reserve allocations.
- There were numerous questions regarding the flexibility of trading allocations within similar river basins. DEQ/DCR explained that trading is complicated but they intend to make sure the EPA will include the allowance of trading.

III. Sector Overview and Review of "Strawman" Management Scenarios

The second presentation focused on describing two new scoping scenarios (Level 3 and Level 2 Scenarios) that were developed to reflect alternative approaches to reduce allocations. The two scenarios outlined specific actions for the onsite/septic sector to reach reduction goals.

Principal Issues and Commentary:

- DCR explained that the Level 2 Scenario is more realistic and achievable than the Level 3 Scenario.
- There was much discussion of, and concern for, the capital and ongoing maintenance costs for retrofitting current on-site systems. An estimate was given

that the costs to upgrade to an alternative system with N-removal ranges from $5,000-10,000 depending on what is currently there and $400-700/year for maintenance requirements.

- EPA assumes that a conventional on-site system attenuates 60% of the influent nitrogen, and that 40% of that reaches surface waters. The loading estimate used in the watershed model is 8.92 pounds/person/year.

Questions:

- Does the model account for the differences of discharge into water?
- What about engineered tank systems?

IV. Health Department's Virginia Onsite/Septic Presentation

The Health Department provided information about conventional and upgraded septic systems. Specific actions that the Virginia onsite/septic sector will need to undertake to meet Level 2 and Level 3 Scenarios were discussed.

Principal Issues and Commentary:

- It was explained that in terms of conventional systems, BMPs could be applied to shallow drip systems. Drip systems are pressurized and are much preferred because the effluent it evenly distributed through the pipes.
- The Health Department is trying to create an inventory for all existing alternative systems. They currently track effluent distribution (BOD, TSS, N & P) for municipal systems but not for onsite systems. The suspended growth systems require maintenance 1 to 4 times per year.
- Concern was expressed over individual neglect and misuse of systems and the difficulty to make a third party be responsible. It was said that this misuse is a current issue being addressed. There is a new regulatory program underway for operation permits for alternative systems. The new program requires that owners must be aware of operator visits, undergo reporting requirements, etc.
- It was expressed that this process is just a "paper exercise." As a practical issue, what about different rules for saturated waters? A specific concern is that P reduction in systems is not a mandate. There was a call for this fixed, restrictive rule to be changed, but also a suggestion that this was not the mandate of the TMDL.
- The discussion described above led to questioning the overall task for the workgroup. One opinion voiced that the task is to meet EPA's standards and rules that the model has set. It is not appropriate to include P actions in this discussion currently but should focus on meeting what EPA is requiring Virginia to do. A second opinion disagreed that the task is to clean up the Bay. The model is just a tool that the sectors shouldn't be bound by it. The group should include and discuss about ways to reduce P in the WIPs.
- DEQ clarified that the EPA is using the model's calibrated numbers for the various checkpoints, not "real field data." The calibrated model uses data from 1985-2005.
- Septage waste may be trucked to wastewater treatment plants in another locality. That will be a challenge to consider when the Phase II WIPs are developed next year for target loads at the locality level.

Questions:

- What about new development in saturated areas?
- Should there be more stringent nutrient limits for discharges in saturated environments?

V. **Options for Addressing Growth in Loads**

Principal Issues and Commentary:

- DEQ explained the two approaches for addressing growth. It was suggested that these approaches might set up incentives for individuals to find loopholes. For example, people avoid retrofitting their outdated septic systems because of cost by stating they will connect to treatment facilities. However, there are enormous costs associated with extending sewer lines.
- About 11,000 new systems are installed each year, with about 10% being alternative systems. Even if all were alternatives systems that reduce the nitrogen load by 50% compared to conventional systems, there still would be a net increase in load to surface waters.
- On-site systems are a small slice of the overall load, are expensive to upgrade with nitrogen removal, but will continue to grow.
- The program should allow for credits when correcting failing laterals, so there will be an incentive to do so.

VI. **Additional Discussion**

Principal Issues and Commentary:

- It was expressed that the scenarios seem unreasonable. DEQ reminded the group that we will soon be working under a TMDL cap. Thus, there will be more pressure to meet allocations among all sectors.
- Questions arose concerning the convoluted dynamic of the onsite/septic sector (with individual homeowners, etc.) and the capability of actually achieving the allocation goals. Alternative approaches were suggested including:
    (1) Determining a mix of Scenario 2 or Scenario 3 that are most reasonable
    (2) Setting up an offset program
    (3) Tax incentive or credit program to focus on priority areas

Questions:

- Are we addressing the legislative capability of this actually happening? How far are we going to go?
- How are individual actions and decisions to be accounted for?

VII. **Issues for Discussion at Next Meeting**

- Next meeting is on Monday, July 26th at 1PM @ DEQ's Piedmont Regional Office
- A goal for next meeting is to get a clear accounting of what to get credit for and to explore opportunities at the locality level for offsets on an individual basis.
- Is there a way to separate Shenandoah from Potomac?